REMARKS

The Examiner rejected claims 1-3, 5, and 7-20 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

The Examiner rejected claims 1-3, 7-8, 13-14, and 17-20 under 35 U.S.C. 103(a) as being unpatentable over Inoue et al. (U.S. 6,477,276) as evidenced by Wallace ("The JPEG Still Picture Compression Standard").

The Examiner rejected claims 5 and 15 under 35 U.S.C. 103(a) as being unpatentable over Inoue as applied to claims 4 and 13 above, and further in view of Vora (U.S. 6,463,162).

The Examiner rejected claims 9-10 under 35 U.S.C. 103(a) as being unpatentable over Inoue as applied to claim 1 above, as evidenced by Johnson et al. ("Exploring Steganography: Seeing the Unseen").

The Examiner rejected claims 11-12 under 35 U.S.C. 103(a) as being unpatentable over Inoue as applied to claim 9 above, and further in view of Ohbuchi et al. ("Watermarking Three-Dimensional Polygonal Modals").

The Examiner rejected claim 16 under 35 U.S.C. 103(a) as being unpatentable over Inoue as applied to claim 13 above, and further in view of Rhoads (U.S. 6,122,403).

A telephonic interview was conducted between Examiner Henning and Marc S. Hanish, Reg. No. 42,626, on January 9, 2008. The Examiner is kindly thanked for granting this interview. During this interview, the Inoue reference was discussed. Specifically, the Examiner indicated that the act of computing the mean values of orthogonal transformed coefficients between at least two adjacent blocks is taught in Inoue at col. 46, lines 16-30, which indicates the mean values of blocks within a group are determined, and at FIG. 13, which describes the groupings of blocks. The examiner pointed out that, for example, the mean values of orthogonal transformed coefficients of the 1st block, 2nd block, 11th block, and 12th block, which are all in the first group and are all adjacent to each other, are calculated, and thus Inoue's comparison is not between values within the same block but between values from multiple adjacent blocks.

After further review of the Inoue reference, Applicant respectfully disagrees with the Examiner's analysis.

Specifically, Inoue discloses multiple independent embodiments. The Examiner has taken elements from a first embodiment and mixed it with elements from a third embodiment, without realizing that these embodiments are distinct and cannot be mixed in the manner the Examiner proposes.

More specifically, the first embodiment of Inoue compares a mean value M directly obtained from a block and mean value M' obtained from the very same block, which has been inverse transformed after a digital watermark is embedded therein. Therefore, the target for the comparison is the same block. Specifically, the first embodiment of Inoue makes a comparison between before and after embedding a digital watermark in that particular block. Looking at FIG. 2, at step S202, Inoue calculates the mean value Mn of the nth block, and at step S211, Inoue calculates the mean value Mn' of the same block after embedding digital information. Furthermore, at step S212, Inoue obtains the difference DMn between the two as Mn' - Mn. It is clear from the suffix n placed after all the variables that these calculations are made with regard to the same nth block.

The third embodiment of Inoue, however, handles four blocks belonging to a single group, as in FIG. 13. In this configuration, however, the DCT coefficients of the four blocks included in this particular group are not compared with one another. This can be seen from sequentially tracing the steps of the flow chart of FIG. 14.

The third embodiment merely uses a mean value Ms obtained from direct current components of multiple blocks, rather than the mean value M used in the processing of the first embodiment.

There is therefore no comparison in Inoue of blocks in a group. All Inoue does is obtain DC components of respective blocks, obtain the inverse linear-quantized value Ms' by using the quantization values qs, and obtain the difference DMs between the original mean value Ms and the mean value MS'. Inoue then embeds this difference DMs into the DC components of the respective blocks (step S1413), only to prevent information from being lost. The fact that comparison of the blocks is not inevitable in the third embodiment is also understood from the description given in column 47, lines 25-27 ("when the block size of a group obtained by the classification is taken as a 1 x 1 size, proceeding for calculating a mean value need not be performed." Inoue's third embodiment is attainable even if the group includes only one block. In other words, Inoue does not compare the blocks.

The claimed invention, on the other hand, compares at least two blocks that have a predetermined positional relationship. Inoue has no concept of comparing coefficients between blocks that have a predetermined positional relationship.

Applicant also respectfully maintains that performing a mean operation does not imply a comparison operation is also performed. A mean is determined by simply adding a series of values and dividing the total by the number of values in the series. There is no need to compare values in order to determine a mean. For example, if a series of values are a, b,

and c, the mean is simply calculated by determining a+b+c and then dividing by 3. There is no comparison of a vs. b, a vs. b, or b vs. c. It is irrelevant whether a is greater or less than b, for example.

Applicant believes that all pending claims are allowable and respectfully requests a Notice of Allowance for this application from the Examiner. Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

Respectfully submitted,
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